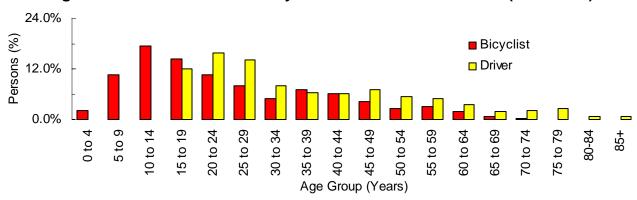
# Bicyclists 2005

## **BICYCLISTS**

#### Did you know that in 2005 . . .

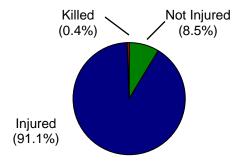
- 718 bicyclists were involved in motor vehicle crashes; 654 were injured, and 3 were killed.
- Bicyclists were 2 times more likely to be killed in a crash than other crash occupants.

#### Age of Persons Involved in Bicyclist-Motor Vehicle Crashes (Utah 2005)



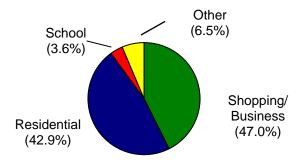
- The highest percentage of bicyclists involved in crashes were aged 10 to 14 years (17.5%).
- The highest percentage of drivers involved in bicyclist crashes were aged 20 to 24 years (15.7%).

## Bicyclist Injury Severity (Utah 2005)



 Nearly all bicyclists (91.1%) involved in crashes sustained an injury compared to 20.2% of all motor vehicle crash occupants.

## Location of Bicyclist-Motor Vehicle Crashes (Utah 2005)



 The majority of bicyclist-motor vehicle crashes occurred in shopping/business (47.0%) and residential (42.9%) areas.

## Top 3 Contributing Factors Involved in Bicyclist-Motor Vehicle Crashes:

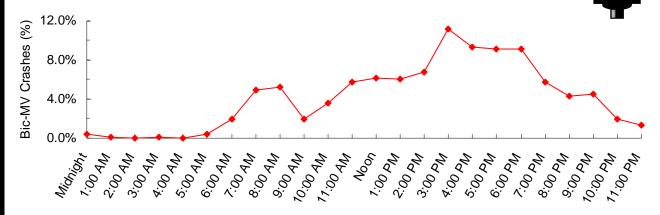
- 1. Improper Lookout (44.5%)
- 2. Failed to Yield Right-of-Way (29.6%)
- 3. Hit and Run (9.2%)
- In addition to the above, "driving under the influence," "had been drinking," and "under the influence of drugs" accounted for 1.1% of total bicyclist-motor vehicle crashes.

## Top 3 Violations of Drivers Involved in Bicyclist-Motor Vehicle Crashes:

- 1. Failed to Yield Right-of-Way (42.9%)
- 2. Improper Lookout (23.2%)
- 3. Other Non-Moving Violations (12.5%)
- Nearly one-third (32.5%) of drivers involved in bicyclist-motor vehicle crashes received a citation.

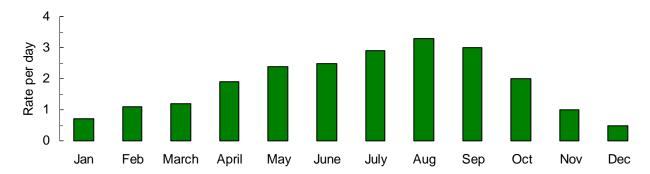
# **BICYCLISTS**

#### Time of Day Bicyclist-Motor Vehicle Crashes Occurred (Utah 2005)



 Bicyclist-motor vehicle crashes occurred most often between 2:00 pm to 6:00 pm. There was also a small peak during the 7:00 am and 8:00 am hours.

#### Month of the Year Bicyclist-Motor Vehicle Crashes Occurred (Utah 2005)

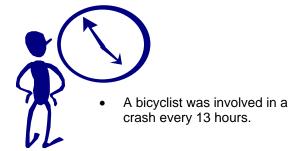


August (3.3) had the highest rate per day of bicyclist-motor vehicle crashes.

#### **Actions of Bicyclists Prior to Crashes (Utah 2005)**

- 1. Riding in Roadway with Traffic (25.2%)
- 2. Riding in Roadway Against Traffic (17.1%)
- 3. Crossing Intersection with Signal (12.1%)
- 4. Riding on Sidewalk (11.7%)
- 5. Crossing Intersection with No Signal (9.7%)
- "Crossing Intersection (with signal, no signal, against signal, diagonally)" comprised 28.7% of bicyclist actions prior to crashes.

#### **Bicyclist Crash Clock (Utah 2005)**



#### **Alcohol and Other Drug Involvement**



 Of the 3 bicyclists killed in 2005, none were impaired by alcohol or other drugs, and 1 bicyclist (33.3%) was killed by an impaired driver.

## **Section 8: Bicyclists**

ection 8: Bicyclists 2005	
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#### **Trends**

#### **Bicyclists Involved in Crashes 1996-2005**

				Bic	yclists				
		Non-Injured	Bicyclists	Injured B	icyclists	Bicyclist	s Killed	Total Bicyclists	
		Non-Injured Rate per		Injured Rate per		Bicyclists Rate per		All	Rate per
		Bicyclists	10,000	Bicyclists	10,000	Killed	10,000	Bicyclists	10,000
Year	Population	#	Population	#	Population	#	Population	#	Population
1996	2,042,893	62	0.30	766	3.7	9	0.04	837	4.1
1997	2,099,409	79	0.38	797	3.8	3	0.01	879	4.2
1998	2,141,632	72	0.34	758	3.5	9	0.04	839	3.9
1999	2,193,014	72	0.33	777	3.5	7	0.03	856	3.9
2000	2,246,553	62	0.28	635	2.8	9	0.04	706	3.1
2001	2,295,971	48	0.21	625	2.7	3	0.01	676	2.9
2002	2,338,761	50	0.21	590	2.5	5	0.02	645	2.8
2003	2,385,358	48	0.20	621	2.6	2	0.01	671	2.8
2004	2,469,230	49	0.20	648	2.6	6	0.02	703	2.8
2005	2,547,389	61	0.24	654	2.6	3	0.01	718	2.8
Total	22,760,210	603	0.26	6,871	3.0	56	0.02	7,530	3.3

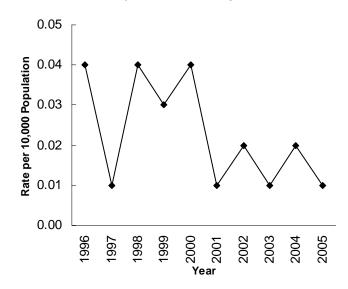
- In 2005, the total rate of bicyclists involved in crashes (2.8), and the rate of bicyclists injured in crashes (2.6), remained the same as the 2004 rates.
- In 2005, there were 3 bicyclists killed in crashes; a rate of 0.01. Because of the small number of bicyclist fatalities, it is difficult to compare increases and decreases from year to year.

#### Bicyclists Injured in Crashes (Utah 1996-2005)

# 84.0 Rate per 10,000 Pobulation 2.00 2 20000 2 2000 2 2000 2 2000 2 2000 2 2000 2 2000 2 2000 2 2000 2 2000

 Over the last ten years, the rates of total bicyclists and bicyclists injured in crashes have followed a similar overall decreasing trend.

#### Bicyclists Killed in Crashes (Utah 1996-2005)



- The rate of bicyclists killed in crashes has varied over time.
- The 2005 rate of bicyclists killed in crashes (0.01) is one of the lowest in the last ten years.

NOTE: Part of the decrease in reported bicyclists involved in crashes from 1997 forward is due to a change in reporting criteria initiated in 1997 that excluded private property crashes. As a result, bicyclists that were involved in crashes that occurred in a parking lot, driveway, and other private roadways are not included from 1997 forward.

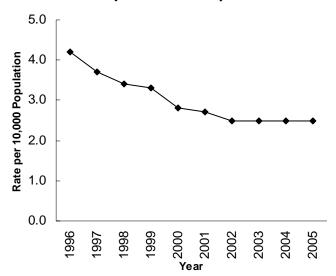
#### **Trends**

#### **Bicyclist-Motor Vehicle Crashes 1996-2005**

	Bicyclist-Motor Vehicle Crashes											
		<b>Property Dama</b>	age Only (PDO)	lnj	ury	Fa	tal	Total				
		Bic-MV	Rate	Bic-MV	Rate	Bic-MV	Rate	All	Rate			
		PDO	per	Injury	per	Fatal	per	Bic-MV	per			
		Crashes	10,000	Crashes	10,000	Crashes	10,000	Crashes	10,000			
Year	Population	#	Population	#	Population	#	Population	#	Population			
1996	2,042,893	61	0.3	858	4.2	9	0.04	928	4.5			
1997	2,099,409	74	0.4	778	3.7	3	0.01	855	4.1			
1998	2,141,632	67	0.3	728	3.4	9	0.04	804	3.8			
1999	2,193,014	66	0.3	732	3.3	7	0.03	805	3.7			
2000	2,246,553	58	0.3	625	2.8	8	0.04	691	3.1			
2001	2,295,971	42	0.2	609	2.7	3	0.01	654	2.8			
2002	2,338,761	44	0.2	585	2.5	5	0.02	634	2.7			
2003	2,385,358	39	0.2	589	2.5	2	0.01	630	2.6			
2004	2,469,230	45	0.2	626	2.5	5	0.02	676	2.7			
2005	2,547,389	50	0.2	637	2.5	3	0.01	690	2.7			
Total	22,760,210	546	0.2	6,767	3.0	54	0.02	7,367	3.2			

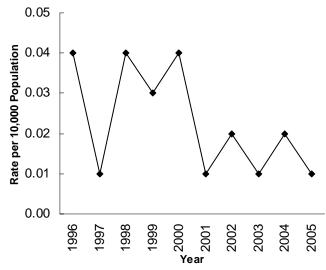
- In 2005, the rate of total bicyclist-motor vehicle crashes (2.7), and the rate of bicyclist-motor vehicle injury crashes (2.5) remained the same as 2004.
- In 2005, there were 3 fatal bicyclist-motor vehicle crashes; a rate of 0.01. Because of the small number of fatal bicyclist-motor vehicle crashes, it is difficult to compare increases and decreases from year to year.

#### Bicyclist-Motor Vehicle Injury Crashes (Utah 1996-2005)



 Over the last ten years, the rates of total bicyclistmotor vehicle crashes and bicyclist-motor vehicle injury crashes have followed a similar overall decreasing trend.

## Fatal Bicyclist-Motor Vehicle Crashes (Utah 1996-2005)



- The rate of fatal bicyclist-motor vehicle crashes has varied over time.
- In the last ten years, the highest rate of bicyclist-motor vehicle crashes occurred in 1996 and 1998 (0.04).

NOTE: Part of the decrease in reported bicyclist-motor vehicle crashes from 1997 forward is due to a change in reporting criteria initiated in 1997 that excluded private property crashes. As a result, bicyclist-motor vehicle crashes that occurred in a parking lot, driveway, and other private roadways are not included from 1997 forward.

#### **Counties**

#### **Bicyclists Involved in Crashes by County (Utah 2005)**

					Bi	cyclists						
	Non-	Injured B	icyclists	lnj	ured Bicy	clists	E	Bicyclists	Killed		Total Bic	yclists
	Non-	Rate	Rate		Rate	Rate		Rate	Rate		Rate	Rate
	Injured	per 100	per	Injured	per 100	per	Bic.	per 100	per	All	per 100	per
	Bic.	Million	10,000	Bic.	Million	10,000	Killed	Million	10,000	Bic.	Million	10,000
County	#	VMT	Population	#	VMT	Population	#	VMT	Population	#	VMT	Population
Beaver	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Box Elder	0	0.0	0.0	4	0.5	0.9	0	0.0	0.0	4	0.5	0.9
Cache	1	0.1	0.1	29	3.2	2.8	0	0.0	0.0	30	3.3	2.9
Carbon	0	0.0	0.0	3	1.0	1.6	0	0.0	0.0	3	1.0	1.6
Daggett	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Davis	1	0.0	0.0	28	1.2	1.0	0	0.0	0.0	29	1.2	1.0
Duchesne	0	0.0	0.0	2	1.0	1.3	0	0.0	0.0	2	1.0	1.3
Emery	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Garfield	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Grand	0	0.0	0.0	1	0.4	1.1	0	0.0	0.0	1	0.4	1.1
Iron	0	0.0	0.0	8	1.3	1.9	0	0.0	0.0	8	1.3	1.9
Juab	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Kane	0	0.0	0.0	1	0.8	1.6	1	8.0	1.6	2	1.5	3.2
Millard	0	0.0	0.0	1	0.2	0.8	0	0.0	0.0	1	0.2	8.0
Morgan	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Piute	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Rich	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Salt Lake	51	0.6	0.5	348	4.3	3.6	1	0.0	0.0	400	4.9	4.1
San Juan	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Sanpete	0	0.0	0.0	1	0.4	0.4	0	0.0	0.0	1	0.4	0.4
Sevier	0	0.0	0.0	1	0.2	0.5	0	0.0	0.0	1	0.2	0.5
Summit	1	0.1	0.3	6	0.9	1.7	0	0.0	0.0	7	1.0	1.9
Tooele	0	0.0	0.0	4	0.5	0.8	0	0.0	0.0	4	0.5	0.8
Uintah	1	0.3	0.4	5	1.5	1.9	0	0.0	0.0	6	1.8	2.2
Utah	5	0.1	0.1	108	3.0	2.4	0	0.0	0.0	113	3.1	2.5
Wasatch	0	0.0	0.0	3	1.1	1.5	0	0.0	0.0	3	1.1	1.5
Washington	1	0.1	0.1	38	3.3	3.0	1	0.1	0.1	40	3.5	3.1
Wayne	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Weber	0	0.0	0.0	63	4.1	2.9	0	0.0	0.0	63	4.1	2.9
Statewide	61	0.2	0.2	654	2.6	2.6	3	0.0	0.0	718	2.9	2.8

- Two different rates are given in the above table; one based on vehicle miles traveled in the county, and another based on the population of the county.
- Rate per 100 million vehicle miles traveled:
  - Salt Lake (4.9), Weber (4.1) and Washington (3.5) had the highest rates of total bicyclists involved in crashes per 100 million vehicle miles traveled.
  - Salt Lake (4.3), Weber (4.1) and Washington (3.3) had the highest rates of bicyclists injured in crashes per 100 million vehicle miles traveled.
- Rate per 10,000 population:
  - Salt Lake (4.1), Kane (3.2) and Washington (3.1) had the highest rates of total bicyclists involved in crashes per 10,000 population.
  - Salt Lake (3.6), Washington (3.0) and Weber (2.9) had the highest rates of bicyclists injured in crashes per 10,000 population.

#### **Counties**

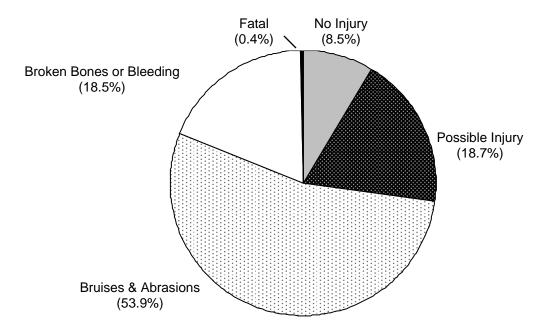
#### **Bicyclist-Motor Vehicle Crashes by County (Utah 2005)**

				Bicyc	list-Mo	tor Vehic	le Cras	hes				
	Property	Damage	Only (PDO)		Injury			Fatal			Total	
	Bic-MV	Rate	Rate	Bic-MV	Rate	Rate	Bic-MV	Rate	Rate	All	Rate	Rate
	PDO	per 100	per	Injury	per 100	per	Fatal	per 100	per	Bic-MV	per 100	per
	Crashes	Million	10,000	Crashes	Million	10,000	Crashes	Million	10,000	Crashes	Million	10,000
County	#	VMT	Population	#	VMT	Population	#	VMT	Population	#	VMT	Population
Beaver	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Box Elder	0	0.0	0.0	5	0.6	1.1	0	0.0	0.0	5	0.6	1.1
Cache	1	0.1	0.1	24	2.6	2.3	0	0.0	0.0	25	2.7	2.4
Carbon	0	0.0	0.0	3	1.0	1.6	0	0.0	0.0	3	1.0	1.6
Daggett	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Davis	1	0.0	0.0	25	1.1	0.9	0	0.0	0.0	26	1.1	0.9
Duchesne	0	0.0	0.0	2	1.0	1.3	0	0.0	0.0	2	1.0	1.3
Emery	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Garfield	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Grand	0	0.0	0.0	1	0.4	1.1	0	0.0	0.0	1	0.4	1.1
Iron	1	0.2	0.2	7	1.1	1.7	0	0.0	0.0	8	1.3	1.9
Juab	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Kane	0	0.0	0.0	1	0.8	1.6	1	0.8	1.6	2	1.5	3.2
Millard	0	0.0	0.0	1	0.2	0.8	0	0.0	0.0	1	0.2	0.8
Morgan	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Piute	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Rich	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Salt Lake	40	0.5	0.4	344	4.2	3.5	1	0.0	0.0	385	4.7	3.9
San Juan	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Sanpete	0	0.0	0.0	1	0.4	0.4	0	0.0	0.0	1	0.4	0.4
Sevier	0	0.0	0.0	1	0.2	0.5	0	0.0	0.0	1	0.2	0.5
Summit	0	0.0	0.0	7	1.0	1.9	0	0.0	0.0	7	1.0	1.9
Tooele	0	0.0	0.0	4	0.5	0.8	0	0.0	0.0	4	0.5	0.8
Uintah	1	0.3	0.4	5	1.5	1.9	0	0.0	0.0	6	1.8	2.2
Utah	5	0.1	0.1	107	2.9	2.3	0	0.0	0.0	112	3.1	2.5
Wasatch	0	0.0	0.0	3	1.1	1.5	0	0.0	0.0	3	1.1	1.5
Washington	1	0.1	0.1	34	3.0	2.7	1	0.1	0.1	36	3.2	2.8
Wayne	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Weber	0	0.0	0.0	62	4.0	2.9	0	0.0	0.0	62	4.0	2.9
Statewide	50	0.2	0.2	637	2.5	2.5	3	0.0	0.0	690	2.7	2.7

- Two different rates are given in the above table; one based on vehicle miles traveled in the county, and another based on the population of the county.
- Rate per 100 million vehicle miles traveled:
  - Salt Lake (4.7), Weber (4.0) and Washington (3.2) had the highest rates of total bicyclist-motor vehicle crashes per 100 million vehicle miles traveled.
  - Salt Lake (4.2), Weber (4.0) and Washington (3.0) had the highest rate of bicyclist-motor vehicle injury crashes per 100 million vehicle miles traveled.
- Rate per 10,000 population:
  - Salt Lake (3.9), Kane (3.2) and Weber (2.9) had the highest rates of total bicyclist-motor vehicle crashes per 10,000 population.
  - Salt Lake (3.5), Weber (2.9) and Washington (2.7) had the highest rates of bicyclist-motor vehicle injury crashes per 10,000 population.

#### **Bicyclist Characteristics**

#### Injury Severity of Bicyclists Involved in Crashes (Utah 2005)



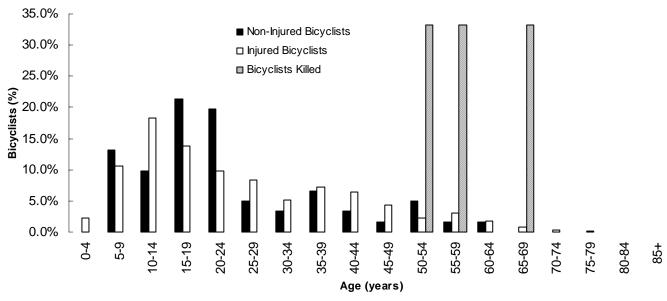
- In the above graph, there were a total of 718 bicyclists involved in crashes.
- The above graph shows that 91.1% of bicyclists involved in crashes sustained a non-fatal injury compared to 20.2% of all motor vehicle crash occupants.
- The percentage of bicyclists killed in crashes (0.4%) was higher than the percentage for all motor vehicle crash occupants killed in crashes (0.2%).
- In fact, bicyclists were 2 times more likely to be killed in a crash than other motor vehicle crash occupants.

#### **Bicyclist Characteristics**

#### Age of Bicyclists Involved in Crashes (Utah 2005)

			В	icyclist	ts				
	Non-li	njured	lnjι	ıred	Bicy	clists	To	otal	
	Bicy	clists	Bicy	clists	Kil	led	Bicyclists		
Age	#	%	#	%	#	%	#	%	
0-4	0	0.0%	15	2.3%	0	0.0%	15	2.1%	
5-9	8	13.1%	69	10.6%	0	0.0%	77	10.7%	
10-14	6	9.8%	120	18.3%	0	0.0%	126	17.5%	
15-19	13	21.3%	90	13.8%	0	0.0%	103	14.3%	
20-24	12	19.7%	64	9.8%	0	0.0%	76	10.6%	
25-29	3	4.9%	55	8.4%	0	0.0%	58	8.1%	
30-34	2	3.3%	34	5.2%	0	0.0%	36	5.0%	
35-39	4	6.6%	47	7.2%	0	0.0%	51	7.1%	
40-44	2	3.3%	42	6.4%	0	0.0%	44	6.1%	
45-49	1	1.6%	29	4.4%	0	0.0%	30	4.2%	
50-54	3	4.9%	15	2.3%	1	33.3%	19	2.6%	
55-59	1	1.6%	20	3.1%	1	33.3%	22	3.1%	
60-64	1	1.6%	12	1.8%	0	0.0%	13	1.8%	
65-69	0	0.0%	5	0.8%	1	33.3%	6	0.8%	
70-74	0	0.0%	2	0.3%	0	0.0%	2	0.3%	
75-79	0	0.0%	1	0.2%	0	0.0%	1	0.1%	
80-84	0	0.0%	0	0.0%	0	0.0%	0	0.0%	
85+	0	0.0%	0	0.0%	0	0.0%	0	0.0%	
Missing	5	8.2%	34	5.2%	0	0.0%	39	5.4%	
Total	61	100.0%	654	100.0%	3	100.0%	718	100.0%	

#### Age of Bicyclists Involved in Crashes (Utah 2005)



- Overall, the largest percentage of bicyclists involved in crashes were aged 10 to 14 years (17.5%). This age
  group also represented the largest percentage of bicyclists injured in crashes (18.3%).
- All of the bicyclists killed in a crash were over the age of 50 years.

#### **Bicyclist Characteristics**

#### **Gender of Bicyclists Involved in Crashes (Utah 2005)**

	Bicyclists												
		njured clists	_	ured clists		clists led	_	otal clists					
Gender	#	%	#	%	#	%	#	%					
Female	7	11.5%	136	20.8%	0	0.0%	143	19.9%					
Male	53	86.9%	503	76.9%	3	100.0%	559	77.9%					
Unknown	1	1.6%	15	2.3%	0	0.0%	16	2.2%					
Total	61	100.0%	654	100.0%	3	100.0%	718	100.0%					

The majority of all bicyclists (77.9%), bicyclists injured (76.9%) and bicyclists killed (100.0%) in crashes were
male.

#### **Actions of Bicyclists Prior to Crashes (Utah 2005)**

	Bicy	clists						
	Non-	Injured	Inj	jured	Bic	yclists	Т	otal
	Bic	yclists	Bic	yclists	Killed		Bic	yclists
Bicyclist Action Prior to Crash	#	%	#	%	#	%	#	%
Riding in Roadway with Traffic	11	18.0%	167	25.5%	3	100.0%	181	25.2%
Riding in Roadway Against Traffic	12	19.7%	111	17.0%	0	0.0%	123	17.1%
Crossing Intersection with Signal	12	19.7%	75	11.5%	0	0.0%	87	12.1%
Riding on Sidewalk	6	9.8%	78	11.9%	0	0.0%	84	11.7%
Crossing Intersection with No Signal	4	6.6%	66	10.1%	0	0.0%	70	9.7%
Crossing Intersection Against Signal	6	9.8%	41	6.3%	0	0.0%	47	6.5%
Crossing Not at Intersection	2	3.3%	35	5.4%	0	0.0%	37	5.2%
Other in Roadway	2	3.3%	11	1.7%	0	0.0%	13	1.8%
Playing in Roadway	1	1.6%	9	1.4%	0	0.0%	10	1.4%
Coming From Behind Parked Cars	0	0.0%	6	0.9%	0	0.0%	6	0.8%
Crosswalk Not at Intersection	1	1.6%	5	0.8%	0	0.0%	6	0.8%
Walking on Sidewalk	0	0.0%	4	0.6%	0	0.0%	4	0.6%
Crossing Intersection Diagonally	0	0.0%	3	0.5%	0	0.0%	3	0.4%
Not in Roadway	0	0.0%	3	0.5%	0	0.0%	3	0.4%
Walking in Roadway Against Traffic	0	0.0%	2	0.3%	0	0.0%	2	0.3%
Other Standing in Roadway	0	0.0%	2	0.3%	0	0.0%	2	0.3%
Walking To or From School	0	0.0%	1	0.2%	0	0.0%	1	0.1%
Missing	4	6.6%	35	5.4%	0	0.0%	39	5.4%
Total	61	100.0%	654	100.0%	3	100.0%	718	100.0%

• Leading bicyclist actions prior to crashes were "riding in roadway (with traffic, against traffic)" (42.3%), and "crossing at intersection (with signal, against signal, no signal and diagonally" (28.7%).

#### **Bicyclists and Helmet Use (Utah 2005)**

 Helmet use for bicyclists involved in crashes was not coded consistently at the scene of the crash and cannot be reported with accuracy. As a result, it is not included in this summary.

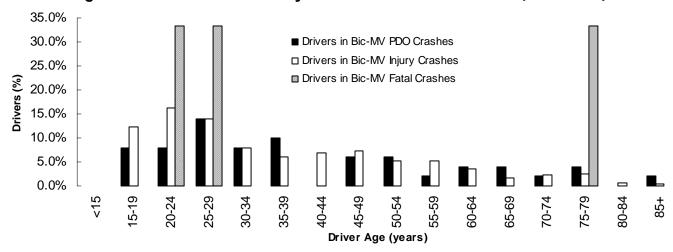
#### **Driver Characteristics**

#### Driver Age (Utah 2005)

	Drivers  Drivers Involved in Drivers Involved											
	Drivers In	volved in	<b>Drivers In</b>	volved in	Drivers In	volved in	<b>Total Drive</b>	rs Involved				
	Bicyclist-M	V Property	Bicycl	ist-MV	Bicycli	st-MV	in Bicyclist-MV					
	Damage Only Crashes		Injury C	rashes	Fatal C	rashes	Crashes					
Driver Age	#	%	#	%	#	%	#	%				
<15	0	0.0%	0	0.0%	0	0.0%	0	0.0%				
15-19	4	8.0%	78	12.2%	0	0.0%	82	11.9%				
20-24	4	8.0%	103	16.2%	1	33.3%	108	15.7%				
25-29	7	14.0%	89	14.0%	1	33.3%	97	14.1%				
30-34	4	8.0%	51	8.0%	0	0.0%	55	8.0%				
35-39	5	10.0%	39	6.1%	0	0.0%	44	6.4%				
40-44	0	0.0%	43	6.8%	0	0.0%	43	6.2%				
45-49	3	6.0%	46	7.2%	0	0.0%	49	7.1%				
50-54	3	6.0%	34	5.3%	0	0.0%	37	5.4%				
55-59	1	2.0%	33	5.2%	0	0.0%	34	4.9%				
60-64	2	4.0%	23	3.6%	0	0.0%	25	3.6%				
65-69	2	4.0%	11	1.7%	0	0.0%	13	1.9%				
70-74	1	2.0%	14	2.2%	0	0.0%	15	2.2%				
75-79	2	4.0%	15	2.4%	1	33.3%	18	2.6%				
80-84	0	0.0%	4	0.6%	0	0.0%	4	0.6%				
85+	1	2.0%	3	0.5%	0	0.0%	4	0.6%				
Missing	11	22.0%	51	8.0%	0	0.0%	62	9.0%				
Total	50	100.0%	637	100.0%	3	100.0%	690	100.0%				

NOTE: More than one driver may be involved in a bicyclist-motor vehicle crash and driver information may be missing (e.g., hit and run).

#### Age of Drivers Involved in Bicyclist-Motor Vehicle Crashes (Utah 2005)



- The above table and graph show that drivers between the ages of 20 to 24 years represented the greatest percentage of drivers involved in total bicyclist-motor vehicle crashes (15.7%). Drivers aged 20 to 24 years also represented the greatest percentage of drivers involved in bicyclist-motor vehicle injury crashes (16.2%).
- Of the drivers involved in fatal bicyclist-motor vehicle crashes, two were aged 20 to 29 years, and another was aged 75 to 79 years.

#### **Driver Characteristics**

#### **Driver Gender (Utah 2005)**

	Drivers											
	Drivers In	volved in	Drivers In	volved in	Drivers In	volved in	<b>Total Drive</b>	rs Involved				
	Bicyclist-M	V Property	Bicycl	ist-MV	Bicycl	ist-MV	in Bicyclist-MV					
	Damage Or	nly Crashes	Injury C	Crashes	Fatal C	rashes	Crashes					
<b>Driver Gender</b>	#	%	#	%	#	%	#	%				
Female	20	40.0%	293	46.0%	0	0.0%	313	45.4%				
Male	23	46.0%	315	49.5%	3	100.0%	341	49.4%				
Unknown	7	14.0%	29	4.6%	0	0.0%	36	5.2%				
Total	50	100.0%	637	100.0%	3	100.0%	690	100.0%				

NOTE: More than one driver may be involved in a bicyclist-motor vehicle crash and driver information may be missing (e.g., hit and run).

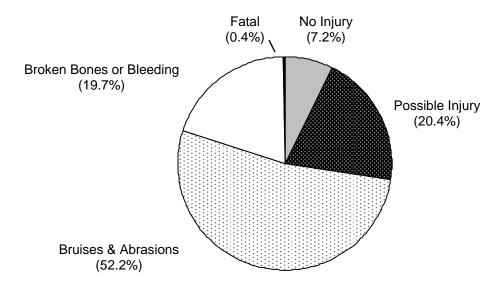
• The majority of drivers involved in total bicyclist-motor vehicle crashes (49.4%), bicyclist-motor vehicle injury crashes (49.5%), and fatal bicyclist-motor vehicle crashes (100.0%) were male.

## Alcohol and Other Drug Involvement of Bicyclists and Motor Vehicle Drivers (Utah 2005)



 Of the 3 bicyclists killed in 2005, none were impaired by alcohol and other drugs, and 1 bicyclist (33.3%) was killed by an impaired driver.

#### **Bicyclist-Motor Vehicle Crash Severity (Utah 2005)**



- In the above graph, there were a total of 690 bicyclist-motor vehicle crashes.
- The above graph shows that 92.3% of bicyclist-motor vehicle crashes resulted in some level of non-fatal injury compared to 35.6% of all motor vehicle crashes.

#### Bicyclist-Motor Vehicle Crashes by Month of Year (Utah 2005)

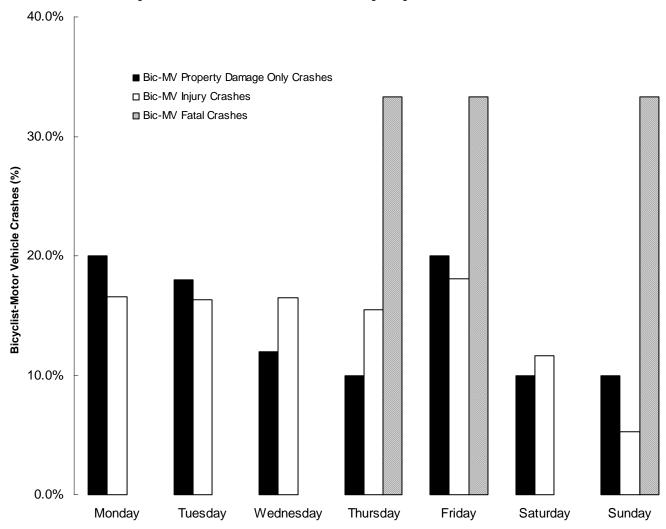
			Bicyclist-N	lotor Vehicle	e Cra	ashes			
		Property Dama	age Only (PDO)	Injury		Fatal		Total	
	Days in	Bicyclist-MV	Rate	Bicyclist-MV	Rate	Bicyclist-MV	Rate	All Bicyclist-MV	Rate
	Month	PDO Crashes	per	<b>Injury Crashes</b>	per	Fatal Crashes	per	Crashes	per
Month	#	#	Day	#	Day	#	Day	#	Day
January	31	2	0.1	21	0.7	0	0.0	23	0.7
February	28	3	0.1	27	1.0	0	0.0	30	1.1
March	31	2	0.1	34	1.1	0	0.0	36	1.2
April	30	2	0.1	56	1.9	0	0.0	58	1.9
May	31	7	0.2	68	2.2	0	0.0	75	2.4
June	30	4	0.1	72	2.4	0	0.0	76	2.5
July	31	6	0.2	85	2.7	0	0.0	91	2.9
August	31	9	0.3	94	3.0	0	0.0	103	3.3
September	30	5	0.2	83	2.8	1	0.0	89	3.0
October	31	8	0.3	52	1.7	2	0.1	62	2.0
November	30	1	0.0	29	1.0	0	0.0	30	1.0
December	31	1	0.0	16	0.5	0	0.0	17	0.5
Total	365	50	0.1	637	1.7	3	0.0	690	1.9

- August (3.3), September (3.0) and July (2.9) had the highest rates per day of total bicyclist-motor vehicle crashes.
- August (3.0) had the highest rate per day of bicyclist-motor vehicle injury crashes.
- Fatal bicyclist-motor vehicle crashes occurred in September and October.

#### Bicyclist-Motor Vehicle Crashes by Day of Week (Utah 2005)

Bicyclist-Motor Vehicle Crashes											
	<b>Property Damag</b>	Injury	Crashes	Fatal (	Crashes	Total Crashes					
Day of Week	#	%	#	%	#	%	#	%			
Monday	10	20.0%	106	16.6%	0	0.0%	116	16.8%			
Tuesday	9	18.0%	104	16.3%	0	0.0%	113	16.4%			
Wednesday	6	12.0%	105	16.5%	0	0.0%	111	16.1%			
Thursday	5	10.0%	99	15.5%	1	33.3%	105	15.2%			
Friday	10	20.0%	115	18.1%	1	33.3%	126	18.3%			
Saturday	5	10.0%	74	11.6%	0	0.0%	79	11.4%			
Sunday	5	10.0%	34	5.3%	1	33.3%	40	5.8%			
Total	50	100.0%	637	100.0%	3	100.0%	690	100.0%			

#### Bicyclist-Motor Vehicle Crashes by Day of Week (Utah 2005)

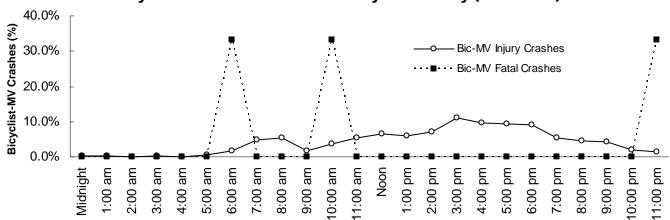


 The above table and graph show that the highest percentage of total bicyclist-motor vehicle crashes (18.3%) and bicyclist-motor vehicle injury crashes (18.1%) occurred on Friday.

#### **Bicyclist-Motor Vehicle Crashes by Hour of Day (Utah 2005)**

Bicyclist-Motor Vehicle Crashes										
	Property Damag	ge Only Crashes	Injury (	Crashes	Fatal (	Crashes	Total Crashes			
Hour	#	%	#	%	#	%	#	%		
Midnight	1	2.0%	2	0.3%	0	0.0%	3	0.4%		
1:00 am	0	0.0%	1	0.2%	0	0.0%	1	0.1%		
2:00 am	0	0.0%	0	0.0%	0	0.0%	0	0.0%		
3:00 am	0	0.0%	1	0.2%	0	0.0%	1	0.1%		
4:00 am	0	0.0%	0	0.0%	0	0.0%	0	0.0%		
5:00 am	0	0.0%	3	0.5%	0	0.0%	3	0.4%		
6:00 am	1	2.0%	11	1.7%	1	33.3%	13	1.9%		
7:00 am	3	6.0%	31	4.9%	0	0.0%	34	4.9%		
8:00 am	1	2.0%	35	5.5%	0	0.0%	36	5.2%		
9:00 am	2	4.0%	11	1.7%	0	0.0%	13	1.9%		
10:00 am	0	0.0%	24	3.8%	1	33.3%	25	3.6%		
11:00 am	5	10.0%	34	5.3%	0	0.0%	39	5.7%		
Noon	1	2.0%	42	6.6%	0	0.0%	43	6.2%		
1:00 pm	4	8.0%	38	6.0%	0	0.0%	42	6.1%		
2:00 pm	2	4.0%	45	7.1%	0	0.0%	47	6.8%		
3:00 pm	6	12.0%	71	11.1%	0	0.0%	77	11.2%		
4:00 pm	3	6.0%	61	9.6%	0	0.0%	64	9.3%		
5:00 pm	4	8.0%	59	9.3%	0	0.0%	63	9.1%		
6:00 pm	5	10.0%	58	9.1%	0	0.0%	63	9.1%		
7:00 pm	5	10.0%	34	5.3%	0	0.0%	39	5.7%		
8:00 pm	2	4.0%	28	4.4%	0	0.0%	30	4.3%		
9:00 pm	4	8.0%	27	4.2%	0	0.0%	31	4.5%		
10:00 pm	1	2.0%	13	2.0%	0	0.0%	14	2.0%		
11:00 pm	0	0.0%	8	1.3%	1	33.3%	9	1.3%		
Total	50	100.0%	637	100.0%	3	100.0%	690	100.0%		

#### Bicyclist-Motor Vehicle Crashes by Hour of Day (Utah 2005)



- In 2005, total bicyclist-motor vehicle crashes and bicyclist-motor vehicle injury crashes followed a similar time pattern, peaking between 2:00 pm and 6:00 pm.
- Fatal bicyclist-motor vehicle crashes occurred during the morning (6:00 am, 10:00 am) and late evening (11:00 pm).

#### **Locality of Bicyclist-Motor Vehicle Crashes (Utah 2005)**

Bicyclist-Motor Vehicle Crashes											
	<b>Property Damag</b>	ge Only Crashes	Injury C	crashes	Fatal C	rashes	Total Crashes				
Locality	#	%	#	%	#	%	#	%			
Shopping/Business	27	54.0%	297	46.6%	0	0.0%	324	47.0%			
Residential	17	34.0%	279	43.8%	0	0.0%	296	42.9%			
School	2	4.0%	22	3.5%	1	33.3%	25	3.6%			
Manufacturing/Industrial	0	0.0%	14	2.2%	1	33.3%	15	2.2%			
Open Country	2	4.0%	11	1.7%	1	33.3%	14	2.0%			
Farms and Fields	1	2.0%	9	1.4%	0	0.0%	10	1.4%			
Playground	1	2.0%	0	0.0%	0	0.0%	1	0.1%			
Church	0	0.0%	3	0.5%	0	0.0%	3	0.4%			
Missing	0	0.0%	2	0.3%	0	0.0%	2	0.3%			
Total	50	100.0%	637	100.0%	3	100.0%	690	100.0%			

- The above table shows the majority of total bicyclist-motor vehicle crashes (47.0%) and bicyclist-motor vehicle injury crashes (46.6%) occurred in shopping/business areas.
- The fatal bicyclist-motor vehicle crashes occurred in school, manufacturing/industrial, and open country areas.

#### **Urban/Rural Location of Bicyclist-Motor Vehicle Crashes (Utah 2005)**

Bicyclist-Motor Vehicle Crashes											
	<b>Property Damage</b>		Injury		Fatal		Total				
	Only Crashes		Crashes		Crashes		Crashes				
Urban/Rural Location	#	%	#	%	#	%	#	%			
Rural Area - Up to 5,000	6	12.0%	104	16.3%	1	33.3%	111	16.1%			
Small Urban - 5,000 to 49,999	2	4.0%	38	6.0%	1	33.3%	41	5.9%			
Moderate Urban - 50,000 to 199,999	1	2.0%	22	3.5%	0	0.0%	23	3.3%			
Large Urban - 200,000 or More	41	82.0%	467	73.3%	1	33.3%	509	73.8%			
Missing	0	0.0%	6	0.9%	0	0.0%	6	0.9%			
Total	50	100.0%	637	100.0%	3	100.0%	690	100.0%			

 Urban areas accounted for 83.0% of total bicyclist-motor vehicle crashes, 82.8% of bicyclist-motor vehicle injury crashes, and 66.6% of fatal bicyclist-motor vehicle crashes.

#### Type of Vehicles Involved in Bicyclist-Motor Vehicle Crashes (Utah 2005)

Vehicles										
	Vehicles II	nvolved in	Vehicles II	nvolved in	Vehicles II	nvolved in	Total Vehicles			
	Bicycl	ist-MV	Bicycl	Bicyclist-MV		ist-MV	Involved in			
	PDO C	rashes	Injury C	crashes	Fatal C	rashes	Bicyclist-MV Crashes			
Vehicle Type	#	%	#	%	#	%	#	%		
Passenger Car	23	45.1%	376	58.5%	1	33.3%	400	57.4%		
Light Truck, Van or SUV	28	54.9%	238	37.0%	2	66.7%	268	38.5%		
Hit and Run Vehicle	0	0.0%	12	1.9%	0	0.0%	12	1.7%		
Large/Semi Truck	0	0.0%	6	0.9%	0	0.0%	6	0.9%		
Motorcycle	0	0.0%	4	0.6%	0	0.0%	4	0.6%		
School Bus	0	0.0%	2	0.3%	0	0.0%	2	0.3%		
Other	0	0.0%	5	0.8%	0	0.0%	5	0.7%		
Total	51	100.0%	643	100.0%	3	100.0%	697	100.0%		

- The above table shows that the largest percentage of vehicles involved in total bicyclist-motor vehicle crashes (57.4%) and bicyclist-motor vehicle injury crashes (58.5%) were passenger cars.
- The majority of vehicles involved in the fatal bicyclist-motor vehicle crashes were light trucks, vans or SUV's (66.7%).

**Bicyclist-Motor Vehicle Crash Violations (Utah 2005)** 

Violations (Drivers)											
	Drivers	Cited in	Drivers	Cited in	Drivers	Cited in	<b>Total Drivers Cite</b>				
	Bicycl	Bicyclist-MV		ist-MV	Bicycl	ist-MV	in Bicyclist-MV				
	PDO C	rashes	Injury (	Crashes	Fatal C	rashes	Crashes				
Violations	#	%	#	%	#	%	#	%			
Failure to Yield Right-of-Way	4	33.3%	92	43.6%	0	0.0%	96	42.9%			
Improper Lookout	1	8.3%	51	24.2%	0	0.0%	52	23.2%			
Other Non-Moving Violations	0	0.0%	28	13.3%	0	0.0%	28	12.5%			
Failure to Stop at Red Light	0	0.0%	7	3.3%	0	0.0%	7	3.1%			
Hit and Run	2	16.7%	5	2.4%	0	0.0%	7	3.1%			
Failure to Stop at Stop Sign	1	8.3%	5	2.4%	0	0.0%	6	2.7%			
All Other Moving Violations	2	16.7%	3	1.4%	0	0.0%	5	2.2%			
Improper Turn (Failure to Signal)	0	0.0%	5	2.4%	0	0.0%	5	2.2%			
Driving Under the Influence	1	8.3%	3	1.4%	0	0.0%	4	1.8%			
Improper Backing	0	0.0%	3	1.4%	0	0.0%	3	1.3%			
Negligent Collision	0	0.0%	3	1.4%	0	0.0%	3	1.3%			
Wrong Side of Road	0	0.0%	3	1.4%	0	0.0%	3	1.3%			
Speeding	0	0.0%	0	0.0%	0	0.0%	0	0.0%			
Following Too Close	0	0.0%	1	0.5%	0	0.0%	1	0.4%			
Improper Passing	0	0.0%	1	0.5%	0	0.0%	1	0.4%			
Improper Lane Change	1	8.3%	0	0.0%	0	0.0%	1	0.4%			
Vehicle Homicide	0	0.0%	0	0.0%	1	100.0%	1	0.4%			
Reckless Driving	0	0.0%	1	0.5%	0	0.0%	1	0.4%			
Total	12	100.0%	211	100.0%	1	100.0%	224	100.0%			

- In 2005, there were 690 drivers involved in bicyclist-motor vehicle crashes. Officers at the scene of the crash cited 224 (32.5%) of those drivers for a traffic violation.
- "Failure to yield right-of-way" was the leading violation for total bicyclist-motor vehicle crashes (42.9%).

#### **Contributing Factors of Bicyclist-Motor Vehicle Crashes (Utah 2005)**

Contributing Factors (Bicyclist-Motor Vehicle Crashes)											
	Co	ntributing	Factors	Coded	for Vehi	cles Inv	olved ir	n:			
	Bicycl	ist-MV	Bicyc	list-MV	Bicyclist-MV		Total				
	<b>Property Damage</b>		lnj	Injury		Fatal		list-MV			
	Only C	rashes	Cra	shes	Crashes		Crashes				
Contributing Factors	#	%	#	# %		%	#	%			
Improper Lookout	18	41.9%	232	45.0%	1	0.0%	251	44.5%			
Failed to Yield Right of Way	9	20.9%	158	30.6%	0	0.0%	167	29.6%			
Hit and Run	9	20.9%	42	8.1%	1	0.0%	52	9.2%			
Other Improper Driving	3	7.0%	17	3.3%	0	0.0%	20	3.5%			
Passed Stop Sign	0	0.0%	9	1.7%	0	0.0%	9	1.6%			
Made Improper Turn	1	2.3%	8	1.6%	0	0.0%	9	1.6%			
Disregard Traffic Signal	0	0.0%	7	1.4%	0	0.0%	7	1.2%			
Other Driver Distractions	1	2.3%	4	0.8%	1	0.0%	6	1.1%			
Improper Backing	0	0.0%	6	1.2%	0	0.0%	6	1.1%			
Speed Too Fast	0	0.0%	5	1.0%	0	0.0%	5	0.9%			
Driving Under the Influence	1	2.3%	3	0.6%	1	0.0%	5	0.9%			
Drove Left of Center	0	0.0%	4	0.8%	0	0.0%	4	0.7%			
Driver Using Cell Phone	0	0.0%	4	0.8%	0	0.0%	4	0.7%			
Improper Overtaking	0	0.0%	3	0.6%	0	0.0%	3	0.5%			
Non-Contact Vehicle Involved	0	0.0%	3	0.6%	0	0.0%	3	0.5%			
Windshield Not Clear	0	0.0%	2	0.4%	0	0.0%	2	0.4%			
Followed Too Closely	0	0.0%	1	0.2%	1	0.0%	2	0.4%			
Wrong Side of Road	0	0.0%	1	0.2%	0	0.0%	1	0.2%			
Asleep	0	0.0%	1	0.2%	0	0.0%	1	0.2%			
Fatigued	0	0.0%	1	0.2%	0	0.0%	1	0.2%			
Had Been Drinking	0	0.0%	1	0.2%	0	0.0%	1	0.2%			
Object in Roadway	0	0.0%	1	0.2%	0	0.0%	1	0.2%			
Brakes Defective	0	0.0%	1	0.2%	0	0.0%	1	0.2%			
Aggressive Driving	0	0.0%	1	0.2%	0	0.0%	1	0.2%			
Improper Parking	0	0.0%	1	0.2%	0	0.0%	1	0.2%			
Cargo Loss or Shifted	1	2.3%	0	0.0%	0	0.0%	1	0.2%			
Total	43	100.0%	516	100.0%	5	0.0%	564	100.0%			

- Contributing factors were coded by the police officer at the scene of the crash for each vehicle involved in the
  crash. The officer may record no contributing factor or up to two different contributing factors.
- "Improper lookout" was the leading contributing factor for total bicyclist-motor vehicle crashes (44.5%), and bicyclist-motor vehicle injury crashes (45.0%).
- The combined contributing factors of "driving under the influence" and "had been drinking" accounted for 1.1% of total bicyclist-motor vehicle crashes, and 0.8% of bicyclist-motor vehicle injury crashes.